

Subcommittee for Landfill Alternatives Meeting Minutes Draft
April 22, 2011

Present: Susan Waite, John Root, Meg Vickery, Laurel Dickey, Susan Morrello, Guilford Mooring and Roger Guzowski

Our current trash removal system in Amherst was reviewed and described. See attached sheet handed out at meeting by Susan Waite.

Northampton landfill closing in 11 mos. South Hadley's landfill has recently been approved to operate for another 3 yrs. Guilford's believes the plan is to then apply to build their existing landfill cells higher, which is unlikely to be approved by DEP.

Guilford clearly stated that all committee work should be open and readily available to the public.

John Root agreed to serve as chair of this subcommittee. Sue Morrello agreed to serve as secretary.

Discussion of options due to closing of local area landfills:

Incinerator – Early incinerators created a lot of air pollution, but technology has greatly improved. New technology now can create energy. Incinerators create CO₂ (a greenhouse gas) but it's not as bad as methane. Covanta is a waste-to-energy incinerator in Springfield. John asked about particulate matter. Committee can visit Covanta for tour and presentation.

Roger said that Smith College waste goes to Covanta. Waste from Amherst and Hampshire Colleges goes to the landfill in Granby. UMass waste goes to Northampton's landfill.

In Massachusetts, there is currently a ban on new facility construction for any sort of waste-to-energy plant. DEP believes MA is heading for zero waste and doesn't want to over build which could result in MA being an importer of trash. This happened in Maine, where they must import trash to keep the incinerator at the proper operating temperature. MA currently sends about a million tons of trash out of state. It goes to upstate NY, western PA, OH or SC. A big facility is needed to be financially lucrative so more and more landfills are becoming just transfer stations.

Guilford suggested that Amherst may be able to pilot something new with DEP like the gasification plant he visited in CT. It's an autoclave that takes solid waste and chips to make gas, water and metal plus heat. Gas can be sold or used to turn generator. UMass could be a potential customer because their steam plant runs on heating oil or gas. There is an autoclave in Eastern WA state where the waste is processed back into fuel oil such as gasoline, heating oil, #2 fuel, banker fuel or asphalt. Both small scale, there are only two in US. Mostly found in China and India. John asked about pollution from these.

Meg spoke about her research into waste-to-energy systems. They are generally cleaner than they used to be. A bigger incinerator is needed so they don't work on a modest scale.

Roger stated that Covanta has an empty bay due to the moratorium. Some political pressure from several towns to push DEP may help. Depending on the time of year, Covanta can have more trash than they can handle. When this occurs, extra trash is sent out of state to other Covanta facilities. An example of this is when area colleges produce one month's worth of trash during student move out

week. MA exports over one million tons of solid waste annually. When the landfills (Chicopee, Noho, Granby) close it will be closer to two million tons. There are very few landfills in Eastern MA, most goes to waste-to-energy facilities.

Laurel asked about the possibility of “mining” old capped landfills (for scrap metal, recyclables, etc.). Guilford thought it unlikely due to industrial and hazardous waste issues. It seems pretty far into the future before that will be done.

Anaerobic Digesters

John talked about Harvest Power, a company that uses anaerobic digestion to create energy and compost. Six acres is needed for the operation. This system uses only organic waste, not all trash. Odor is a possible issue.

There is an anaerobic digester in Rutland, MA. The Pioneer Valley Planning Commission wants regional composting. Noho wants to reopen with the equipment at Smith Vocational. It's sitting there and ready to go. The issue is with restaurants and how to gather trash in the tight space of most kitchens and the high level of contamination. Casella Waste is planning to install anaerobic composters at seven large dairy farms in MA. Food waste will come from Cambridge, MA. This system reduces sludge at the farms. It was originally developed for large cattle farms which produce a lot of methane which can now be captured and made into a biogas. Anaerobic digesters want material with the highest nitrogen like real plant material and manure not compostable plates and paper napkins.

It was brought up that there are pharmaceuticals in wastewater.

Amherst's major waste streams are:

1) waste water sludge; 2) leaves, 3) municipal solid waste; 4) construction and demolition waste

It costs the town \$400K/yr for waste water sludge disposal. It is shipped to Blackstone (an incinerator).

It is hard to know what is in the trash and to further separate each stream.

An anaerobic digester is slated to go into Barstow Dairy Farm in Hadley. This is one of the seven farms that Casella is involved with. Casella is interested in bigger organics generators (rather than residential sources).

Meg spoke about using the Mt Tom site as an option for locating a facility.

Committee wrapped up by saying that the purpose of committee is to recommend what direction the town should go in for solid waste removal. Town meeting will need to approve all purchase agreements. ZBA will need to grant permits.

Next meeting: May 11th, 3pm @ DPW to evaluate options.